

## CLAIMS

I claim:

1. An improved turbine engine topology, wherein the improvement comprises a repositioning, with respect to a conventional intercooled regenerative turbine engine topology, of exhaust gas output from a low pressure turbine stage to a regenerator, to an exhaust gas output from a high pressure turbine stage to the regenerator.
2. The engine topology of claim 1 further comprising, as an intermediate stage between the high pressure turbine and the low pressure turbine, a feedback control system, whereby the exhaust gas output from the high pressure turbine stage to the regenerator flows through the feedback control.
3. The engine topology of claim 2 further comprising an additional cooler and an additional exhaust gas output in the feedback control, whereby exhaust gas flows from the feedback control through the additional cooler to a high pressure compressor stage.